

ABSTRACT OF THE DISCLOSURE

A digital imaging system includes an image sensor, a frame buffer and a tone correction circuit. The tone correction circuit computes tone corrected pixel data using one or more tone correction curves. In operation, tone corrected pixel data for a first pixel is computed by generating a pixel mask for an $m \times n$ neighborhood of pixels surrounding the first pixel, applying a blending mask of weight factors to the pixel mask and computing a selector value based on the pixel mask and weight factors associated with the blending mask. The selector value is used to derive a first tone correction curve for use to compute the tone corrected pixel data for the first pixel. The first tone correction curve can be selected from the multiple tone correction curves based on the selector value or it can be derived by blending multiple tone correction curves based on the selector value.